

XXX.—*Descriptions of apparently new Species and Subspecies of Monkeys of the Genera Callicebus, Lagothrix, Papio, Pithecus, Cercopithecus, Erythrocebus, and Presbytis.* By D. G. ELLIOT, D.Sc., F.R.S.E., &c.

THE various species and subspecies described in this paper are all, with one exception, contained in the magnificent collection of Primates in the British Museum. Some of these new forms I saw in my previous investigations of the collection, but did not describe them at the time, preferring to wait until additional material, if it existed, could be examined in continental museums.

With his usual kindness and generous method of acting towards a colleague, my friend Mr. Oldfield Thomas repeated the desire he expressed on a former occasion that I should describe any example I considered to be unknown; and it is in fulfilment of this wish that I appear as the author of this paper.

The collection of Primates in the British Museum, under the wise management of Mr. Thomas, as Head of the Department of Mammals, has increased materially during the past two years, and in numerous genera in the number of species and examples is probably the richest in the world, and so offers the most favourable opportunities for critical investigation.

The types, with one exception, the numbers of which are given in this paper, will be found in the collection, for future examination.

I desire, in conclusion, to express my thanks to Mr. Thomas for his kindness and assistance afforded me in my by no means easy task.

Family Cebidæ.

GENUS CALLICEBUS.

Callicebus pænulatus, sp. n.

Type locality. Andoas, on the Pastasa River, Ecuador.

Gen. char. Fur very long, thick, and fluffy; mantle uniform colour, distinct from back; arms from elbows, hands, feet, and legs above knees uniform colour.

Colour. Forehead grizzled ochraceous, the hairs black, with ochraceous tips, this being the dominant colour; crown and occiput rich cinnamon-rufous, this colour produced by the tips of the hairs; mantle uniform tawny ochraceous, extending behind shoulders; middle of back dark hair-brown,

grading into tawny ochraceous on the rump; flanks dark grizzled brownish grey; hairs on ears, cheeks, arms from elbows, hands, legs from above knees, feet, inner side of limbs, chin, throat, and under parts of body rich dark burnt sienna; tail very long, grizzled white and black, the orange-buff of the basal portion of the hairs showing through, darkest at base, and the tip buff; the rest of the tail is tawny ochraceous like the rump.

Measurements. Total length 850 mm.; tail 520 (skin). Skull: occipito-nasal length 29·1; zygomatic width 40·6; palatal length 29·1; length of nasals 9·3; length of upper molar series 14·2; length of mandible 41·3; length of lower molar series 15·8.

Type. Adult, in British Museum, no. 89. 5. 6. 14.

This species differs in many ways from all the others in the genus. It is the only one of the *cuprea* style with a uniformly coloured mantle, and one so long and thick as to resemble a mane. The red on arms and legs extends much higher than in any other species. A single specimen was procured by Mr. Buckley at Audobas.

GENUS LAGOTHRIX.

Lagothrix thomasi, sp. n.

Type locality. Callanga, Cuzco, Peru. Altitude 1500 m.

Colour. Head in front of ears seal-brown; upper parts of body, flanks, and arms to elbow grizzled grey and ochraceous, the hairs being ochraceous at base and ringed with black and white, and tipped with white; dorsal line blackish; hairs on back of neck ochraceous, with a single broad subterminal black band and white tip, causing this part to be darker than the rest of the upper parts, excepting the dorsal line; forearms and legs grizzled black and tawny, the hairs being tawny, with subterminal black bar and white tip; hands and feet black, the hairs with tawny tips; inner side of arms and legs and central portion of chest and abdomen black; tail above and basal portion beneath grizzled grey and ochraceous like back, remainder beneath black.

Measurements. Size quite equal to that of *L. lagotricha*. Skull: occipito-nasal length 98 mm.; hensel 88·4; zygomatic width 79·4; intertemporal width 59·4; palatal length 59·6; length of nasals 10·7; length of upper molar series 24; length of mandible 78; length of lower molar series 38·5.

Type. Adult, in British Museum, no. 98. 11. 6. 2.

This is a larger monkey than the next species, *L. ubericola*, and fully equal in size to *L. lagotricha*. The type is an old individual with the teeth greatly worn and blackened. It is much darker than *L. ubericola*, and the base of the hairs ochraceous instead of buff. There are none of the blue and silver-grey hues so characteristic of *L. lagotricha*, and the red of *L. canus* is absent altogether.

It gives me great pleasure to name this fine species after my friend Oldfield Thomas, Esq., Curator of Mammals in the British Museum, who presented the type to the Institution.

Lagothrix ubericola, sp. n.

Type locality. Barrigudo River Jurua, Upper Amazon.

Geogr. distr. Upper Amazon, Rio Solimoens, and Rio Jurua to Peru.

Gen. char. Colour pale; hair soft, rather short, buff at base.

Colour. Top of head to nape, inner side of hands, and feet black; upper parts of body and arms to elbows grizzled wood-brown, with a reddish tinge on rump and thighs, the hairs being buff at base, with a subterminal black ring and whitish tips; outer side of forearms iron-grey; top of leg to knee iron-grey, when the colour becomes blackish brown, the hairs with yellow tips on the fingers and toes, which are black; flanks and sides of abdomen yellowish brown; chest and middle of abdomen black; hairs of tail above like upper side of legs, tawny ochraceous with black and white rings and white tips, beneath rufous brown at base, rest black.

Measurements. About the size of *L. lagotricha*, but more slender. Skull: total length 116.6; occipito-nasal length 103; zygomatic width 65.7; intertemporal width 59.5; palatal length 30; breadth of brain-case 61.5; length of nasals 10.6; length of upper molar series 25.2; length of mandible 69; length of lower molar series 29.

Type. Adult, in British Museum, no. 3 9. 1. 3.

The type is full-grown, but not an old animal, and differs greatly from *L. lagotricha*; and as the young of that species resembles the adult, this one cannot be considered as representing the same species. The locality of the type is south of the range of *L. lagotricha*. It is a much more slender animal, and its very bright colour, a grizzled wood-brown, makes it conspicuously different from all the other members of the genus.

Family Cercopithecidæ.

Subfamily CERCOPITHECINÆ.

GENUS PAPIO.

Papio tessellatum, sp. n.

Type locality. Mulema, Aukole, Uganda, East Africa.

Colour. Hairs throughout on head, neck, and body seal-brown, with a broad subterminal darkish cream-colour band and black tip. This gives a chequered appearance to the coat, as on the surface the cream-colour and black only appear. Arms mostly dark cream-colour, the black tips of the hairs forming distinct lines on the upper and lower side; wrists and hands black, a small tawny patch on the back of the latter; legs dark cream-colour mixed with black, the latter showing chiefly on the lower inner side; feet black; tail cream-colour, the hairs being seal-brown on basal half, remainder cream-colour to tip; upper part of throat and sides of the head greyish white; face black.

Measurements. Total length 1400 mm.; tail to end of hair 500; foot 210. Skull: occipito-nasal length 170; hensel 158; zygomatic width 131.1; intertemporal width 60.9; palatal length 94; length of nasals 80; width of brain-case 85.6; length of upper molar series 58.3; length of upper canines 43.1; length of mandible 150; length of lower molar series 66.

Type. Adult male, in British Museum, no. 5. 4. 3. 1.

The type and a young animal from Rogoro which I consider to be of the same species are in the collection of the British Museum. The type is a very large animal, and its rather unusual distribution of colours serves to make it quite conspicuous when placed with other species of the genus. The type was obtained by Col. G. Delmé Radcliffe, and the Rogoro example by C. S. Betton, Esq. The facial region of the skull equals in length that of the brain-case; the rostrum is broad and the nasals are rounded and raised above the plane of the nose; lateral pits large and deep posteriorly; a small process on the frontal ridge over each orbit near posterior end of nasals, curving downward and inward, and pointed; teeth large; upper canines very long and sharply pointed.

Papio nigeriæ, sp. n.

Type locality. Ibi, Northern Nigeria, West Africa.

Gen. char. General colour mottled black and cream; size

large; skull compared with that of *P. heuglini* from the Sudan has the ridges on sides of rostrum less elevated; rostrum much narrower, being 39.2 to 46.2 mm.; septum between orbits much narrower, 13 to 15.3 mm.; lateral pit not so deep; palate narrower; teeth much smaller and the length of molar series shorter by nearly half the length of posterior molar of *P. heuglini*.

Colour. General colour of top of head, upper parts, and sides to rump mixed black and cream-colour, the latter most prominent, the hairs being purplish brown, with two bands of cream-colour and black tip. The purple under colour shows through the cream and black, producing a grey shade; hairs on rump and lower back have bands of ochraceous, giving this part a reddish hue; face and chin naked, black; throat greyish; chest similar to back; abdomen like rump, bands ochraceous; arms like back to below elbows, when the black predominates to the wrists and hands, which are almost entirely black; legs redder, being tawny on thighs and growing lighter to the ankles, which are buff-yellow; feet black; tail cream-colour and olive mixed, the former colour predominating. Callosities large, colour lost in the skin.

Measurements. Size equal to *P. porcarius* or *P. doguera*. Skull: occipito-nasal length 161 mm.; hensel 153; zygomatic width 133; intertemporal width 60.9; palatal length 97.5; width of brain-case 86.4; length of nasals 81.1; length of upper molar series 53.9; length of mandible 168; length of lower molar series 71.1.

Type. Adult, in British Museum, no. 7. 7. 8. 12.

This is a very large dark baboon, the pelage exhibiting a mixture of cream-colour and black, with purple under colour showing, and grading into the tawny hue of lower back and legs. The skull shows the most trenchant characters and is markedly different from its probably nearest ally in its shorter tooth-row and smaller teeth. Two specimens are in the collection.

Papio brockmani, sp. n.

Type locality. Dirre Dawa, Somaliland, East Africa. Altitude 3500 feet.

Gen. char. Colour very different from *P. abyssinicus*; inclined to reddish, no grey on mane. Skull, compared with one of *P. abyssinicus* obtained by Rüppell, has a shorter facial region; rounded zygomatic arches, not squared as in the other; straight tooth-rows and smaller teeth; outer edge of lacrymal from orbital ridge to root of zygoma straight,

not flaring outward at bottom as in the skull of the allied species; rostrum broader posteriorly; palate of equal width throughout its length; orbital ridge straight, not depressed in centre; septum narrower; orbits more circular.

Colour.—*Adult male.* Face flesh-colour; callosities red; forehead covered with black hairs banded with white, this colour rising in the shape of a pyramid and coming to a point on the crown of the head; hairs on cheeks and sides of head long, stiff, very dense, rising upwards in enormous tufts above the head, yellowish white at base, grading into buffy at tips; hind-neck and mantle pale reddish brown, with a band of white, succeeded by a subterminal one of black, and tip silvery white; towards the lower back the colour darkens into cinnamon annulated with bands, and with tips of a paler cinnamon; upper part of rump ochraceous buff, paler than the mantle; lower rump and base of tail silvery white; hairs on sides of lower jaw long, dense, yellowish white; throat more sparsely covered with hairs of same colour; chest dark grey, hairs banded with black and white and tipped with white; abdomen ochraceous; arms and hands like forehead, grizzled, hairs banded with black and white, and grizzled reddish, hairs banded with reddish brown and white; tail grizzled russet and white, tuft russet.

Measurements. Total length 1322 mm.; tail 572; foot 188; ear 59 (collector). Skull: total length 180.4; occipito-nasal length 147.9; hensel 125.7; intertemporal width 56.6; width of brain-case 80; length of rostrum 91.2; width of rostrum posteriorly 46.6; zygomatic width 119.7; palatal length 76.8; length of nasals 52.1; length of upper molar series 44.6; size of last upper molar, crown, 10×8.5 ; length of mandible 136.1; length of lower molar series 57; size of last molar, crown, 13.5×8.5 .

Type. Adult male, in British Museum, presented by Dr. D. Drake-Brockman. No. 9. 6. 1. 1.

The type is a very fine specimen of an adult male. As shown by the description, it differs in many ways from the Abyssinian Hamadryas, and also from the Arabian, as the latter seem to be nearer the Abyssinian species than to the present one. The pale reddish mantle and parti-coloured rump of ochraceous buff and silvery white causes it to be very conspicuously different when placed among other examples of Hamadryas baboons. The type was procured by Dr. D. Drake-Brockman, after whom I have great pleasure in naming it.

GENUS PITHECUS.

This genus *Pithecus* was established by I. Geoffroy St. Hilaire and Cuvier in 1795 in the 'Magasin Encyclopédique.' In this paper seven genera were named, *Pithecus* being the fourth, as follows:—"Genre IV^e Macaque. *Pithecus*. Museau assez court, angle facial de 50°; tête aplatic; une crête sus-cilière; 5 dents molaires; queue allongé, non prenante; des abayoues, le plus souvent des callosités. Les guenons de Buffon à museau court et nez déprimé; quelques uns de ses babouins; *S. veter, silenus, faunus, cynomolgos, sinica, &c.*" This volume, being rather rare, has been consulted by comparatively few naturalists of the present time, and it has been contended by some that the paper was never really published, in spite of the fact that when cited the page number was given. Fortunately some copies of this volume of the 'Magazine' are to be found, and in London, known to me, is one in the British Museum, and another in the Natural History Museum, South Kensington. It is fortunate that *Pithecus* can thus be authenticated, and the barbarous term *Macaca*, which had in some instances been employed, be relegated to the list of synonyms.

Pithecus littoralis, sp. n.

Type locality. Kuantun, Province of Fokein, China.

Gen. char. General hue tawny olive and black; tail short, bushy; fur loose, long, soft.

Colour. Top of head and hind-neck mummy-brown speckled with ochraceous buff; upper parts tawny olive and black, grading into uniform russet on the rump; arms to elbows tawny olive, paler than the back; lower arms and hands olive-brown, speckled with yellow; outer surface of thighs russet; legs and feet buff, with an olive tinge; sides of head tawny olive; long brown and black stiff hairs over eyes on the brow, inclining upward and outward on each side; entire under parts and inner side of limbs yellowish grey; tail above at base dark russet, darker than rump, remainder brownish black; beneath buff-yellow; face flesh-colour, covered sparsely with blackish-brown hairs.

Measurements. Total length 810 mm.; tail (imperfect) 200; from another specimen with complete tail (no. 7. 3. 3. 5) to end of hairs 280. Skull: total length 118.6; occipitonasal length 102.7; hensel 79.3; zygomatic width 83.7; intertemporal width 46; width of brain-case 64.2; length of nasals 19.8; palatal length 45.5; length of upper molar

series 33.2; length of mandible 85.4; length of lower molar series 37.

Type. Adult female, in British Museum, no. O. 5. 8. 1.

There are three examples of this species in the British Museum, all females, but agreeing in the texture and colour of fur, two from Kuatun, and the third from the menagerie of the Zoological Society in Regent's Park, erroneously attributed to Cashmere. Both the Kuatun examples have lost a portion of their tails, but the third specimen has a tail of normal length. In general colouring this species resembles *P. tcheliensis*, Milne-Edwards, = *P. lasiotis*, Gray; but the great distance intervening between the habitats, nearly the entire width of China, does not permit the supposition that they can belong to the same species. I can only regard it as the coast representative of the Szechuen species *P. lasiotis*, of which *P. tcheliensis* is the female. The male of this new form when obtained will probably be darker in colour.

Pithecus brachyurus, sp. n.

Type locality. Island of Hainan.

Gen. char. Tail not half the length of body and head; similar in colour to *P. rhesus*, but smaller, with a shorter tail and very different cranial characters.

Colour. Top of head, nape, hind-neck, and upper parts of body to rump speckled black and russet; rump dark orange-rufous; arms and hands speckled blackish and buff, hairs grey on basal half, this colour giving a dominant tone; flanks and legs ochraceous, unspckled; long stiff black hairs on superciliary line; sides of head yellowish grey, some black hairs on cheeks forming a short line beneath eyes; face flesh-colour, becoming blackish on lips, which are sparsely covered with short white hairs; chin, throat, and under parts of body to anal region yellowish white; hairs about scrotum and anal region orange-rufous, like rump; inner side of legs yellowish; feet brownish grey; tail above speckled blackish brown and ochraceous, beneath paler.

Measurements. Total length 730 mm.; tail 220; foot 135. Skull: total length 116.1; occipito-nasal length 100; intertemporal width 46.3; breadth of brain-case 60.6; hensel 78.3; zygomatic width 81.8; length of nasals 25; palatal length 42.3; length of upper canines 21; length of upper molar series 29.8; length of mandible 82.2; length of lower molar series 36.6.

Type. Adult male, in American Museum of Natural History, New York, no. 27.577.

This Macaque, while having a general resemblance to *P. rhesus* of India, differs in various ways from that species. The tail is much shorter and the colouring on the rump and about the scrotum much brighter. The cranial characters differ widely. The orbital ridge is rounded, not depressed and flattened, and consequently there should be an absence of the scowling look so often seen in adults of *P. rhesus*. Another character that instantly attracts the eye is the greater width and lateral swellings of the rostrum of the Indian species, the Hainan animal having a rather long rostrum for its width, with the sides descending rather abruptly from the nasals. The orbits of *P. brachyurus* are circular, those of the allied species oblong; the brain-case of the Hainan Macaque is somewhat more bulging posteriorly and the palate is deeper and narrower; the bullæ are shorter and wider, while the tooth-rows of upper jaw are nearly straight and the teeth much smaller; the mastoid width much less, and the mandible having proportionately greater depth and less expansion at coronoid processes. This comparison is made between two skulls of males of about the same age.

Several specimens of this Macaque were received by the American Museum in a collection from the Island of Hainan. On examining the specimens in New York I was satisfied that they represented a species distinct from *P. rhesus*, but not having any examples of that animal for comparison, I preferred to wait until the two species could be brought together. Dr. Allen selected three which the Museum forwarded to me in London, and after comparing these with skins and skulls of *P. rhesus* in the British Museum, the distinctness of the Hainan Macaque was demonstrated.

Pithecus validus, sp. n.

Type locality. Cochin China, exact locality unknown.

Gen. char. Body stout, heavy; limbs short; tail not quite so long as the body. Skull with facial region almost as long as the brain-case; rostrum longer than wide; palate long and narrow; tooth-rows straight; sagittal crest present; second upper molar largest; last lower molar with prominent posterior cusp; mandible heavy, comparatively massive for its length; canines stout.

Colour. Middle of crown, nape, line over eyes, and line on sides of head black speckled with buff; rest of crown and entire upper parts Prout's brown washed with olive, grading to raw umber on sides and arms, and all speckled with buff;

outer side of thighs olive speckled with buff; rump and legs below knees greyish olive speckled with buff; sides of head and neck olive-grey; under parts of body and inner sides of limbs greyish white; feet olive-brown speckled with buff; tail above black on basal half, grading into blackish brown on the rest, beneath pale yellowish olive; face flesh-colour.

Measurements. Total length 1030.3 mm.; tail 365; foot 125 (skin). Skull: total length 125.3; occipito-nasal length 103.6; hensel 84.9; zygomatic width 82.5; facial length 78.9; width of brain-case 57; greatest width of rostrum 38; length of nasals 35.5; palatal length 50.7; length of upper molar series 30.2; length of mandible 93.2; length of lower molar series 36.9; depth of jaw beneath second molar 23.8.

Type in British Museum, no. 81. 6. 30. 2.

The unique type of this very unusually coloured Macaque is stated to have come from Cochin China, no particular locality in that country being specified. In its peculiar brown and olive-yellow speckled fur it more nearly resembles the long-tailed species *P. irus* of the Malay Peninsula, Burma, &c., but is a much more powerful animal, has not any reddish brown on the head, and a much shorter tail; in fact, it does not resemble closely any described species of Macaque at present known to me.

Pithecus alacer, sp. n.

Type locality. Bliah, northern point of Kundur Island.

Gen. char. General colour much paler than the examples from Singapore and Bintang Islands, approaching nearer to those from Karimon Island, but paler; skull and teeth more like the dark Macaque from Singapore Island. Fur long, soft; tail as long as body. Tooth-rows straight. Eyes flesh-colour.

Colour. General colour hazel on dorsal region, grading to raw umber or tawny olive on sides, the hairs on back being grey at base, then blackish brown, and then banded with black and tawny ochraceous, while the hairs on flanks are grey, banded with ochraceous buff; the hairs on head and nape are black at base, then orange-ochraceous, and tipped with black; narrow line above eyes grizzled grey; numerous stiff black hairs behind the grey line, the longest hairs standing out from the head on each side; face and cheeks covered with very short grey hairs; sides of head yellowish white, hairs long and directed forward and upward; upper side of arms and hands cream-buff, the hairs being purplish,

with cream-buff tips; upper side of thighs like back; rest of legs yellowish grey; feet olive-brown; under parts of body and inner side of limbs yellowish white; tail above black, speckled with white for three-fourths the length, and then grading into hair-brown, tuft at tip bistre, beneath pale reddish brown; eyelids and patch over eyes flesh-colour.

Measurements. Total length 794 mm.; tail 361; foot 125; ear 33 (collector). Skull: total length 110.6; occipito-nasal length 92.7; hensel 72.7; intertemporal width 41.1; zygomatic width 72.8; greatest width of brain-case 58; palatal length 73.5; length of nasals 24.8; length of upper molar series 26.1; length of mandible 79; length of lower molar series 33.

Type in British Museum, no. 9. 4. 1. 36.

This Macaque exhibits an entirely differently coloured pelage from the Singapore species, and one much nearer to the Kuruman and Sumatran forms, while the skull in its characters is closer to the Singapore animal. In colour it is reddish brown, duller in hue than the Macaques from either of the islands above named. The affinities of these monkeys from the various islands of this archipelago are rather difficult to understand, and why their colouring should be similar in Kundur and the islands to the south as far as Sumatra, and the cranial characters should so nearly agree with the Singapore species, separated as it is by intervening islands inhabited by an allied but different form, is difficult to explain. It would be practically useless to theorise upon this condition of things, although in ornithology a similar state of affairs exists among some genera of birds in the Eastern Archipelago, such as *Pitta*; but in the case of the Macaques these animals are probably in process of change influenced by their insular habitats, though these islands are but short distances apart, and it is rather difficult to appreciate how great these influences may be. At present we only know that material differences do exist, and of such importance as to compel us to regard the individuals from the various islands as possessing characters so unreconcilable with each other as to prevent us from believing them all to belong to one and the same species.

Pithecus karimoni, sp. n.

Type locality. Monos, eastern coast of the island of Karimon.

Gen. char. Similar in colour to *P. fascicularis* of Sumatra, and its skull nearer to that species than it is to those of

the Macaques from Kundur or Singapore, its neighbours. Facial portion of skull shorter than brain-case; teeth large; tooth-rows curved very slightly; second and third molars much longer than first in both jaws; orbital ridge broad and long; rostrum short and broad; brain-case broad and rounded. Pelage moderately long, smooth; tail about equal in length to body; forehead above eyes to hair flesh-colour.

Colour.—*Male.* General hue tawny ochraceous, reddish on head and neck, dorsal region darkest and becoming more yellow on the sides, the hairs on back being purplish grey at base, then banded with tawny ochraceous and black, and the hairs on flanks yellowish grey banded with white; outer side of arms grizzled grey, hairs being grey banded with black and cream-buff; hands and fingers black, covered with yellowish-white hairs; outer side of thighs like back, legs bluish grey; under part of body and inner side of limbs greyish white; tail grizzled black and white above, brownish grey beneath; feet brownish grey.

Young females are lighter in colour, some being a pale reddish hue.

Measurements. Total length 206 mm.; tail 432; foot 152; ear 35 (collector). Skull: total length 111.6; occipito-nasal length 92.5; hensel 75.2; zygomatic width 76.9; intertemporal width 38.7; width of brain-case 54.7; greatest width of rostrum 38.4; length of rostrum 40; palatal length 41.7; length of nasals 17.5; length of upper tooth-row 27.7; length of mandible 79.7; length of lower tooth-row 35.6.

Type in British Museum, no. 9. 4. 1. 34.

This Macaque, while resembling its relative in colour of pelage from Kundur next to it on the south, agrees in its cranial characters with those of *P. fascicularis* from Sumatra, a rather inexplicable fact in both cases of this species and the one from Kundur skipping the island nearest to it, and agreeing more nearly in the cranial characters with the species farthest from it on the north and south.

Pithecus letus, sp. n.

Type locality. Island of Tingi, South China Sea, off south-east coast of Malay Peninsula.

Gen. char. Colour similar to, but paler than, that of *P. karimoni* and its allies; tail longer than head and body. Skull with facial length nearly equal to that of brain-case; teeth moderately large, canines very long; bony crest for

nearly the entire length of brain-case; tooth-rows slightly curved; last lower molar nearly one-third longer than second molar, and with six well-developed cusps.

Colour. Forehead flesh-colour. General hue wood-brown, with a reddish tinge, brightest on head, where the hairs are purplish on basal half, then banded with ochraceous, the bands lighter in hue on lower back and rump, where they become cream-buff; space above eyes flesh-colour (yellowish in skin), stiff black hairs on edge of forehead; nose and lips covered with very short iron-grey hairs; sides of crown and head whitish grey; hairs turning upwards in front of ears; outer side of arms and hands greyish cream-colour; legs whitish grey; feet brown, covered with whitish-grey hairs; chin broccoli-brown; rest of under parts and inner side of limbs yellowish white; tail above black on basal half, remainder bluish grey, beneath pale drab-grey.

Measurements. Total length 975 mm.; tail 550; foot 129 (collector). Skull: total length 114.7; occipito-nasal length 98.8; hensel 76.3; zygomatic width 80.3; intertemporal width 41.4; width of brain-case 57.7; length of rostrum 41.6; width of rostrum, beneath orbit 32.1, at jaw 39.1; palatal length 42.9; length of nasals 18.1; length of upper molar series 30; length of canines 25.2; length of mandible 87.4; length of lower molar series 68.7.

Type. Adult, in British Museum, no. 9. 4. 1. 21.

This is a much paler Macaque than any of the other island forms described, with pale yellowish-grey arms and whitish-grey legs. The general colour of the top of head and nape at a little distance is ochraceous, contrasting rather strongly with the reddish wood-brown of the back. The skull is rather large and heavy, more like that of *P. fascicularis* of Sumatra than of any of the Macaques described from the other islands. Two specimens from Tioman Island, north of Tingi, are much darker in colour, but as they present no cranial difference from Tingi skulls, I have not separated them, though the colouring of the fur is quite different.

Pithecus dollmani, sp. n.

Type locality. Changi Island, off south-eastern part of Singapore Island.

Gen. char. Resembling in colour the next species, *P. bintangensis*, but much larger and with different cranial characters. Skull longer and heavier; width across orbital ridge greater; intertemporal width greater; brain-case

longer and broader; zygomatic arch less rounded anteriorly; rostrum wider than long; incisor teeth much larger; tooth-rows curved, not straight; basioccipital much wider; lower molars smaller; ascending ramus of mandible wider; upper and lower tooth-rows much longer.

Colour. Patch above eyes flesh-colour. General hue burnt umber, as in *P. bintangensis*, and hairs banded in the same way with tawny ochraceous; top of head redder than in the species compared, the arms more thickly speckled with yellow and the legs much paler, a smoke-grey instead of iron-grey; tail black above, silvery grey beneath; rest of pelage like *P. bintangensis*.

Measurements. Total length 977 mm.; tail 573; foot 135; ear 34 (collector). Skull: total length 110·8; occipito-nasal length 94·2; hensel 78·5; zygomatic width 73·2; intertemporal width 42·1; greatest width of brain-case 57·1; length of orbital ridge 53·9; greatest width of rostrum 35; length of rostrum 35·9; length of nasals 24; palatal length 39; length of upper tooth-row 29·1; length of mandible 79·2; length of lower tooth-row 37·4.

Type in British Museum, no. 9. 4. 1. 20.

With the exception of a redder head and hind-neck and paler legs, the present species and the one from Bintang Island resemble each other in colour; but *P. dollmani* is a larger and finer animal and has very different cranial characters, as shown above.

It gives me much pleasure to name this handsome Macaque after Mr. G. Dollman, Assistant in the Mammalogical Department of the British Museum, who has been of the greatest aid to me in my investigation of the Primates in the collection of the Institution.

Pithecus bintangensis, sp. n.

Type locality. Sungei Biru, north-east part of island of Bintang.

Geogr. distr. Islands of Bintang and Batam.

Gen. char. General hue dark burnt umber; facial region three-fourths the length of the brain-case; septum very narrow; outer edge of zygomatic arch straight, sloping slightly inward posteriorly to root of zygoma; greatest width of rostrum equal to its length; tooth-rows straight; teeth of moderate size; width of palate about equal throughout its length; brain-case balloon-shape, much constricted at intertemporal region, bulging posteriorly.

Colour.—Male. Patch above eyes flesh-colour; general

hue above burnt umber on head and upper parts, the hairs being slate-grey and banded on apical half with tawny ochraceous and black; narrow line over eyes blackish grey; numerous long stiff black hairs standing erect over forehead, producing an indistinct black line on each side; nose covered with short grizzled black and white hairs; sides of face buffy, sides of head from below ears and on cheeks with long greyish hairs banded with white and projected forward, forming bushy whiskers; outer sides of arms and thighs iron-grey, hairs banded with cream-buff; legs below knees iron-grey; under parts and inner side of limbs greyish white; hands and feet iron-grey, speckled with cream-buff like limbs; tail above black, sparsely speckled with white, beneath silver-grey.

Female. Upper parts russet, speckled with cream-buff; arms and hands blackish, speckled with cream-buff; thighs like back, legs olive-grey; feet and toes black, covered with grey hairs; tail like that of the male.

Measurements. Total length 96.4 mm.; tail 50.8; foot 117.5; ear 29 (collector). Skull: total length 105.5; occipito-nasal length 85.5; hensel 73.5; zygomatic width 72.5; intertemporal width 37.1; width of brain-case 54.9; length of orbital ridge 45.4; greatest width of rostrum 38.5; length of rostrum 38.5; length of nasals 24.4; palatal length 44.6; length of upper tooth-row 26.7; length of mandible 80.8; length of lower tooth-row 35.

Type in British Museum, no. 9. 4. 1. 23.

There is a great difference in the colouring of the sexes of this species, the female being much lighter and redder, and this difference is exhibited in very young males, which are as dark as the adult males. This species appears also to be a resident of Batam Island. Unfortunately only females were procured there, but they closely resemble the females from Bintang Island. Of course, adult males, when obtained, may possess different cranial characters, and possibly also coloration, for it seems to be the fact, so far as our material enables a judgment to be formed, that the various islands possess distinct forms; but at present the examples are not sufficient for a decision to be arrived at, and we must regard the examples from the two islands as the same.

GENUS CERCOPITHECUS.

Cercopithecus insolitus, sp. n.

Type locality. Northern Nigeria.

Gen. char. Reddish brow-band; upper parts black speckled.

Colour. Hairs on forehead ochraceous rufous and black over nose, where it is deepest in colour, paler towards sides; superciliary stripe beneath the red line black, but rather indistinct at sides; head black, speckled on crown with ochraceous, slightly paler than the frontal band; hairs over temples black, rather long, directed backward and passing over the ears; hair on cheek directed backward under and behind ears, black speckled with yellow; occipital region with but very few yellow speckles; entire upper parts of body greyish black, minutely spotted with cream-buff; flanks greyish black, faintly speckled with white; arms and hands black, unspeckled; legs black, speckled with cream-buff on upper part of thighs, and with white lower down to ankles; feet black; chin, throat, chest, anal region, inner side of arms to elbows, and thighs to knees whitish yellow; abdomen grey, with a yellow tinge; tail above at base like back, grading into black speckled with white, and then into jet-black on apical fourth; beneath yellow, speckled at base, then profusely speckled with white, causing the midway section to appear quite grey; tip black.

Measurements. Total length 1060 mm.; tail 680; foot 115. Skull: brain-case broken; only the rostrum, zygomatic arches, and mandible remaining. Width of orbits at inner edge 43.4; length of nasals 14.3; zygomatic width 55.4; palatal length 24.6; length of mandible 24.3.

Type in British Museum, no. 62. 7. 17. 3.

The type is a young animal, but quite different in appearance to any of the known species, so different, in fact, that it is difficult to assign its proper place in the genus, for, like *C. phoesti*, it does not seem to have any near allies. The unique type was obtained in Northern Nigeria by the expedition under Dr. Baikie.

Cercopithecus tantalus griseistictus, subsp. n.

Type locality. Bambara, Welle River, Monbuttu Country, Central Africa.

Gen. char. Similar to *C. t. budgetti* on upper parts, but hands and feet grizzled grey, with fingers and toes silvery grey.

Colour. Face and chin black, paler around eyes; nose, fore part of cheeks, lips, and chin covered with short black hairs; broad white brow-band of stiff erect hairs, with a narrow line in front between eyes of stiff black hairs; some long stiff black hairs from corner of eyes directed backward and lying between whiskers and hair of head; top of head,

the hairs are black from root and tipped with ochraceous, this being the dominant colour on head; back of neck and upper parts of body grey, speckled with yellow and black; dorsal line, lower back, and rump darker, speckled with black and buff; shoulders like upper back; outer side of arms and hands, legs, and feet grey, speckled with black and white; the arms near shoulders and thighs near hips speckled with yellow and black; whiskers very long, extending beyond and hiding the ears, yellowish white, some of the upper hairs banded with black on apical portion; sides of neck, throat, and entire under parts of body and inner side of limbs greyish white; scrotum surrounded by rufous hairs; flanks paler than upper parts, hairs speckled with yellow and black; tail above speckled yellow and black for half the length, rest broccoli-brown; no tuft. Iris brown.

Measurements. Total length 1290 mm.; tail 720; foot 135 (skin). Skull: total length 113.2; occipito-nasal length 95.5; intertemporal width 44.7; hensel 40.5; zygomatic width 77.5; breadth of brain-case 56.4; length of nasals, 21.2; palatal length 40.3; length of upper molar series 27.8; length of canines 21.3; length of mandible 82.1; length of lower molar series 34.6.

Type in British Museum, no. 7. 7. 8. 2.

This race resembles *C. t. budgetti* in the colouring of the upper parts, but differs in having the grey hands and feet of *C. tantalus*. From the latter species it differs in cranial characters. When two old male skulls are compared, that of the present race is seen to be much longer in every way: wider orbits and brain-case, but narrower rostrum; intertemporal width greater; nasals much longer; zygomatic width greater; palate longer; tooth-rows of both jaws longer by the width of the first premolar; and bullæ much longer and more elevated. In fact, the cranial characters are so different it is not worth while to compare them. The upper parts, as in *C. t. budgetti*, are much darker than in *C. tantalus*.

Cercopithecus rubellus, sp. n.

Type locality. Fort Hall.

Gen. char. General hue reddish, no white on under parts.

Colour. Brow buffy white, black on lower edge; face brownish black; hairs on upper lip to below eyes, and chin, black; top and back of head speckled black and ochraceous, latter colour most prominent; entire rest of upper parts of body tawny, with rather indistinct black speckling, tawny

being the prevailing hue; flanks paler, a rather bright ochraceous of uniform shade; no annulations; outer side of arms above elbows mixed grey and cream-buff; forearms pale grey, with black annulations on hairs; outer side of legs grey, with tawny hairs intermingled near hips, and black annulations on hairs; side of head, whiskers (which are directed backwards, covering ears), throat, inner side of arms, and legs pinkish buff; abdomen and anal region cream-buff; tail above tawny and black, like back, growing darker and merging into black on apical portion, beneath rufous patch at root, then ochraceous grading into tawny at tip; hands and feet black.

Measurements. Total length 1260 mm.; tail 740; foot 150 (skin). Skull: total length 92.2; occipito-nasal length 81.8; intertemporal width 44.7; lensel 65; zygomatic width 67.6; breadth of brain-case 53.8; length of nasals 16.4; palatal length 30.9; length of upper molar series 22.6; length of upper canines 16; length of mandible 68.2; length of lower molar series 30.

Type in British Museum, no. 6. 2. 1. 1.

The general appearance of this species is that of a reddish monkey, quite different in colouring from its paler relatives of the *C. centralis* style. It is nearer to the animal from Portuguese East Africa, which has been accepted as representing *C. rufoviridis*, but differs from that species in its pinkish-buff whiskers, throat, and general colour of the under parts and in its jet-black hands and feet.

A number of specimens from Fort Hall are in the British Museum. Unfortunately there are no skulls of the *C. c. johnstoni* specimens, so I can make no comparison between it and the present species.

Cercopithecus pogonias pallidus, subsp. n.

Type locality. Gaboon, West Africa.

Gen. char. Similar to *C. greyi*, but paler beneath, no uniform black on rump, hairs speckled like back to root of tail.

Colour.—Female. Forehead like that of *C. greyi*; upper parts of head, hind-neck, and between shoulders redder, speckled buff-yellow and black, the buff-yellow being the dominant colour and giving the tone to all this part; upper parts of body to tail much redder, speckled ochraceous rufous and black, becoming darker towards root of tail, where the speckling is less; flanks grey, speckled on apical half of hairs with yellow and black; outer sides of arms and

hands black, speckled with cream-colour; legs pale grey, speckled with white; feet, posterior half speckled grey and white, anterior half and toes black; whiskers yellowish grey, annulated at tips with black and yellow; tail above black, beneath yellowish with black mixed and grading into black towards the tip; ear-tufts buff.

Measurements. Total length 1295 mm.; tail 705; foot 115 (skin). Skull: total length 90; occipito nasal length 78.3; intertemporal width 37.6; hensel 54.8; zygomatic width 56.2; width of brain-case 51.1; length of nasals 16.5; palatal length 31; length of upper molar series 23; length of mandible 56.3; length of lower molar series 26.7.

Type in British Museum, no. 86.6.7.2.

The specimens from the Gaboon are much paler than those from the Benito River, even when examples of the same sex are compared. The head, upper part of back, legs, and under parts of body are much paler in their several colours, and the dorsal region is paler and brighter, appearing more red, and there is an absence of clear black at root of tail, the speckling of the back continuing to the tail. There exist several points of difference in the character of the crania, which if sustained by a number of individuals would be sufficient to give to this form specific rank. On comparing the skull of the type with that of a female from the Benito River, the great difference in the superior outline is at once observed. In the Gaboon skull there is an abrupt rise of the frontal from the posterior base of the orbital ridge, with a gradual curve to the fronto-parietal suture, and the line then descends rapidly to the interparietal suture, and then drops at a more than a 45° angle to the occiput. The skull of the Benito River female has a flat frontal, on a line with the orbital ridge and descends much more rapidly from the fronto-parietal suture to the occiput; the anterior portion of the nasals in the type is nearly at a right angle to the posterior portion, the projecting forward occurring about midway the length, causing the nasal opening to be horizontal save for its anterior third; the rostrum of the Gaboon specimen is narrower, the palate narrower and deeper, the molar series longer by the width of a tooth; zygomatic arches of a different shape, those of the Benito River examples are straight for nearly their whole length, while those of the type curve inward rapidly anteriorly. Even comparing the skull of a male from the Benito River with that of the type of *C. p. pallidus* the much higher elevation of the frontal bone in the latter is remarkable, and the more prominent anterior portion of the nasals is conspicuous.

Cercopithecus sticticeps, sp. n.

Type locality. N'dongo-leti, on the Upper Ubangui River, Central Africa.

Gen. char. No solid black on top of head or hind-neck, all speckled.

Colour. Band of rather stiff hairs standing upright over the eyes, black banded with white; top and sides of head, back and sides of neck, upper parts of body and flanks speckled buff and black; chin and throat greyish white; under parts smoke-grey, apical half of hairs banded with black and white; tail at base speckled buff and black like back, then for rest of basal half above speckled black and white, beneath at base black, faintly speckled with white, rest of basal half paler, more of a brownish hue; apical half above and beneath jet-black; large white spot on nose.

Measurements. Total length 1345 mm.; tail 830; foot 125. No skull.

Type in the British Museum, no. 7. 7. 8. 5.

A single specimen obtained by the Alexander-Gosling Expedition; it differs markedly from *C. nictitans* in having no solid black hairs on the head or neck, and in having them speckled with buff and black instead of white and black, and, in certain lights, in having a greenish tinge on the dorsal region. The sex of the specimen is not known.

Cercopithecus silaceus, sp. n.

Type locality. South bank of the Loangwa River, Angoniland, British East Africa.

Geogr. distr. Loangwa River to Angola, West Africa.

Gen. char. General hue yellowish green speckled with black, and yellow on the flanks with distinct black speckling.

Colour. Greyish white brow-band mixed with black on hairs over nose and at each end; hairs on forehead standing upright, speckled with black and tawny, the latter being the prevailing colour; dorsal region from nape to tail speckled black and buff-yellow, the black being equally prominent with the lighter colour, especially on dorsal line from between shoulders and on lower back and rump, making these parts darker; back beneath shoulders on either side of the dorsal line, and flanks, buff-yellow, annulated and tipped with brownish black, the lighter colour, however, predominating to the extent of giving all these parts a yellowish appearance; shoulders darker than flanks, but not so dark as

dorsal line, the hairs speckled ochraceous and black; outer side of arms and legs grey, speckled on arms above elbows and on thighs with cream-colour and black, and on fore-arms and legs below knees with black and white; wrists and hands black, speckled with white; feet grey and black speckled, toes brownish black with some white hairs intermingled; whiskers long, directed backwards hiding the ears, cream-colour annulated with black; face, lips, and chin covered with short brownish-black hairs; sides of neck, throat, inner side of limbs, and entire under parts white; tail above for three-fourths the length speckled cream-colour and black, rest jet-black, underside with a rufous patch at root, rest whitish grey, becoming buff on apical part, the extreme tip only being black.

Measurements. Total length 1190 mm.; tail 730; foot 125. Skull: total length 1032; occipito-nasal length 87; intertemporal width 42.9; hensel 72; zygomatic width; 72.9; width of brain-case 57.5; length of nasals 16.1; palatal length 38.3; length of upper molar series 25; length of upper canines 15.5; length of mandibles 74.7; length of lower molar series 30.8.

Type in British Museum, no. 7. 1. 11. 1.

There are three specimens of this species in the British Museum—one from the east bank of the Loangwa River, collected by Mr. S. A. Neave at an altitude of 2000 feet, and one from Limondi on the boundary between the English and Portuguese territories; and one from north Basilimdo Chiyaka District, Angola, West Africa, collected by Dr. F. C. Wellman. They closely resemble each other, and give the impression of a yellow monkey speckled on head, middle of back, and rump with black, but the annulations rather indistinct on flanks. By having the red patch beneath the tail at the root, the species evinces a relationship to *C. pygerythrus*, but it bears no resemblance whatever to that animal in its general coloration, and, in fact, is far too much of a yellowish hue to be compared with any other species of the genus. It doubtless is a dweller in the forests on the watershed from the Loangwa westward to Angola. It is a large thick-set animal, with rather short limbs and long tail.

GENUS ERYTHROCEBUS.

Erythrocebus formosus, sp. n.

Type locality. Uganda, particular locality not given, East Africa.

Gen. char. Similar to *E. pyrrhonotus*, but with a much darker rump and tail; more black on shoulders, and under parts of body buff-pink with a yellow line down centre instead of white.

Colour. Head, face, and cheeks like *E. pyrrhonotus*, with white patch on end of nose; the black brow-line is not distinct between the eye and ears, and turns up over the crown from the outer corner of the eyes as in the allied form; top of head foxy red; head above ears, nape and hind-neck, and shoulders ochraceous buff, hairs yellow-tipped; lower back to rump and flanks pinkish, hairs tipped with yellow, this colour giving a yellow hue to all the upper parts; rump vinaceous rufous, grading into bay at tail and hips; sides of neck and chest lemon-yellow, some hairs tipped with black; outer side of arms lemon-yellow; inner side of arms and the hands white; under parts of body buff-pink, with a yellow line down centre of belly; chin, throat, and centre of chest white, this hue narrowing to a point on lower part of chest as it is encroached upon by the lemon-yellow colour from each side; outer side of thighs in front to knees like rump, on sides pale yellow, below knees the legs and feet are white; inner side of thighs and legs greyish white; tail bay, slightly paler at tip.

Measurements. Total length 1410 mm.; tail 740; foot 145 (skin). No skull.

Type in British Museum, no. 9. 2. 21. 2.

This is a large species resembling *E. pyrrhonotus* on upper parts, except on rump, which, with the tail, is much darker, in fact quite a different colour; the thighs also are not like those of its relative, and the sides of neck and arms are lemon-yellow, quite different from the grey chest and yellowish-white arms of the allied species; the under parts of the body are altogether different, a colour difficult to describe, but which I have called "buff-pink."

The only species of *Erythrocebus* dwelling near *E. formosus* is *E. baumstarki* from Masai Land, but as that animal has no black on brow or head it cannot even be comparable with the present species.

Erythrocebus albigenus, sp. n.

Type locality. Egyptian Soudan, exact locality not known.

Gen. char. Black brow-band extending from corner of eye to crown, not to ear; thighs mostly white; hairs on hind-neck and shoulders very long, mane-like.

Colour.—*Adult male.* Face and nose black; narrow line on edge of upper lip white; black brow-band mixed with white over eyes, turning upwards at corner of eyes and encircling the crown; no black line from eyes to ears; crown foxy-red, rest of head and hind-neck tawny ochraceous, hairs with a subterminal yellow band and black tips; dorsal region dark ochraceous rufous, becoming a bright bay on flanks and rump; hairs tipped with golden, only occasionally one with a black tip; shoulders covered with long black hairs annulated with cream-colour; sides of face white; whiskers and sides of neck white tinged with yellow; inner and outer sides of arms white; upper part of thighs near hips bright bay like rump, rest of thighs and legs on inner and outer sides white; feet yellowish white; chin, throat, and chest white; middle of abdomen pale yellow; tail above bay, beneath yellowish white.

Measurements. Total length 1070; tail imperfect 430; foot 140 (flat skin). Skull: total length 135; occipito-nasal length 114; intertemporal width 47.3; lensel 94.7; zygomatic width 80; breadth of brain-case 59.3; length of nasals 25.2; palatal length 47.7; length of upper canines 34.7; length of upper molar series 29.7; length of mandible 81.8; length of lower molar series 36.6.

Type in British Museum, no. 8.6.15.1.

This species is distinguishable from *E. poliophæus* by having white forearms, no black line from eye to ear, and the unspeckled deeper colour of the upper parts of the body and rump. The skull is much longer and narrower, the second molar larger, the last molar and second premolar smaller than the corresponding teeth in *E. poliophæus*.

GENUS PRESBYTIS.

Presbytis nudifrons, sp. n.

Type locality. Bejalong, Sarawak, North-east Borneo.

Gen. char. Bare spot on forehead similar to that of *P. frontata*, but divided in the middle by a line of short black hairs running through forehead to end of nose, these hairs growing towards each other from each side and forming a low ridge where they meet; crest equally long throughout its length from forehead to nape, the hairs turned forwards; no brown colouring on any part of the pelage. Skull without the high forehead of *P. frontata*, the frontal being only slightly raised, and the superior outline posteriorly descending rapidly to the occiput.

Colour. Face flesh-colour, forehead orange-yellow; eyelids black; line of short black hairs across forehead and down nose; hairs on upper lip and cheeks black, those from the latter very long and extending to the neck; hairs from corner of the eyes and those from forehead black, very long and directed backward on sides of the head joining on temples; hairs on centre of head to nape very long, erect, directed forward forming a crest, sepia in front, grading to slate-grey on hind-neck; entire upper parts and sides of body slaty grey; outer side of arms to below elbows like upper parts; forearms, hands, legs, and feet black; throat white; under parts of body brownish grey; inner side of arms to below elbows, and inner side of legs to near ankles, greyish white, darkest on legs below knees; tail above and beneath black at base, remainder silvery grey tinged with brown.

Measurements. Total length 1170 mm.; tail 645; foot 160 (skin). Skull: total length 98.5; occipito-nasal length 87.7; intertemporal width 48.1; henzel 38.9; zygomatic width 71.8; width of brain-case 55.5; length of nasals 12; palatal length 26.7; length of upper molar series 25; length of upper canines 16; length of mandible 15.9; length of lower molar series 29.

Type. Adult male, in British Museum, no. 4. 2. 9. 1.

This species is found on the opposite side of Borneo from that in which *P. frontata* dwells. It has a squarish, not triangular bare place on the forehead, but divided in this species by a line of short hairs. In colour the two forms are entirely different; none of the adults or young in the British Museum of *P. frontata* exhibit the colouring of the present species.

Presbytis melamera, sp. n.

Type locality. Cadu Ciaung, Bhamo, North Burma.

Gen. char. Resembles *P. obscura*, but legs uniformly sooty or blackish brown; hair long, thick, soft; head without crest.

Colour. Long hairs on forehead directed upward and forward, and with hairs on cheeks framing the face, black; hair on back of neck long, extending on to the back, drab-grey, but not forming a conspicuous patch as in *P. obscura*; dark hairs on head and back mingling with the light ones; top of head, sides of body and rump, shoulders and outer side of arms and legs to wrists and ankles, blackish brown; dorsal region more reddish brown and paler than the flanks;

whiskers long, blackish brown, hairs with pale tips; chin white; under parts, inner side of arms and thighs sparsely covered with whitish hairs; inner side of legs below knees similar to upper parts but paler; tail blackish brown at base grading into greyish brown, and with a white patch at base of tail beneath; face brownish, with space around eyes apparently red; cheeks and sides of upper lip covered with black hairs; upper lip in the centre beneath nose covered with short white hairs.

Measurements. Total length 1210 mm.; tail 750; foot 150 (skin). Skull: total length 91.5; occipito-nasal length 80.3; intertemporal width 43.5; breadth of brain-case 56.8; hensel 60; palatal length 27.1; length of nasals 10.8; length of upper molar series 26.1; length of mandible 64.4; length of lower molar series 32.3.

Type in the British Museum, no. 88. 12. 1. 64.

This monkey, which resembles somewhat *P. obscura*, is easily distinguished from it by having the thighs coloured like the upper parts of the body, by the absence of a conspicuously defined nuchal patch, and by the dark tail. The hair is much less silky in texture, and more suitable for the less temperate climate of the more northern region in which it dwells. The unique type was procured by L. Fea, and presented to the British Museum by the Marquis Doria.

Presbytis nubigena, sp. n.

Type locality. Keka, Malacca.

Gen. char. Eyelids, lips, and chin flesh-colour, face brownish black. General colour very dark above, top of head black; under parts light; hair radiating from a central point on the crown; short occipital crest.

Colour. Long black hairs on forehead directed outward; top of head black, hairs greyish and white at base; neck and entire upper part of body, outer side of arms, Prout's brown, wrists and hands black; outer side of thighs greyish white; from hips to below knees on middle of thighs runs a brownish-black line, much mixed with brownish-grey hairs near hips, feet blackish; hairs from eyes across temples seal-brown; whiskers beneath these hairs yellowish grey; sides of neck, chin, throat, inner sides of arms and legs, under parts of body and flanks greyish white; tail Prout's brown on basal half, grading into blackish brown for the remainder.

Measurements. Total length 1190 mm.; tail 700; foot 180. Skull: total length 90; occipito-nasal length 74.2; intertemporal width 40.8; breadth of brain-case 54;

hensel 62.2; zygomatic width 67.6; length of nasals 11.5; palatal length 30; length of upper molar series 27.9; length of mandible 68.4; length of lower molar series 31.9.

Type in British Museum, no. 79.11.21.595.

Several specimens of this species from the southern part of Malacca are in the British Museum, resembling each other in colour, much darker than examples from the Straits Settlements and lower part of the Peninsula, and more like *P. obscura*, but without the nuchal patch and not so dark in colour. These examples had gone heretofore under the name of *albocinereus*, Desmarest; but that supposed species was stated to be on the upper parts, including "épaules, flanes, face externe du haut des bras et des cuisses, d'un gris clair; milieu du dos d'un gris un peu plus foncé," which in no wise describes any Sumatran *Presbytis* I have ever seen, and comes nearer to *P. uggula* from Java than any other. Eydoux and Souleyet in their work on the voyage of the 'Bonite' describe and figure a monkey under the name of *albocinereus*, Desmarest, but which agrees in no respect with the description that author gives of his species, and is evidently the *Semnopithecus obscurus* Reid described in 1837, four years previously. These authors state that Desmarest's specimen was still in the Paris Museum, but as they do not say it was the original of the figure in their plate, they must have had it drawn from another specimen, not the type. Now, rather in contradiction of Messrs. Eydoux and Souleyet, comes forward Isidore Geoffroy Saint Hilaire, who, in his Catalogue of the Primates, 1851, p. 12, under *Semnopithecus obscurus* makes the following statement regarding the *S. albocinereus* of Eydoux and Souleyet: "Décrits et figurés dans la relation du voyage de la Bonite sous le nom de *Sema. albocinereus* les Auteurs ayant cru retrouver dans cette espèce le *Cercop. albo-cinereus* de M. Desmarest, espèce établis sans doute par suite d'une confusion de notes, et qui est à retrancher." The italics are mine. No mention, of course, is made, after the above statement, of any specimen which had served as Desmarest's type being in the Museum, as he did of others throughout his catalogue that were still in the collection, and if it had been preserved he would certainly have known it, and we must therefore presume that Messrs. Eydoux and Souleyet erred when they stated that the type of *albocinereus* was in the Museum. The matter then resolves itself into this, that Desmarest's description of *albocinereus* does not apply to any known species of monkey in Sumatra, nor can it, with any certainty, be given to any monkey from any other locality, and is therefore, in the absence of any

type, indeterminable, and the name *albocinereus*, if not dropped from our list, must remain in abeyance until some Sumatran monkey is found answering to the description given by Desmarest. Schlegel in the 'Museum des Pays-Bas,' Singes, p. 12, made an attempt to revive the name, but unfortunately mixed different species from Malacca and Sumatra in his comparisons, and failed to produce an animal resembling *albocinereus*, Desmarest. Failing, therefore, to acquire the right to bear the name given by Desmarest, certain Malaccan forms heretofore passing under the name of *albocinereus* will have to be christened anew, of which the first is the dark monkey from Southern Malacca, and another, the next species, from the southern end of the Peninsula, which leads on to the island forms called respectively *P. rhionis* and *P. cana*.

Presbytis dilecta, sp. n.

Type locality. Selangore.

Gen. char. Hairs radiating from a point on the forehead; general hue of body pale; thighs white with dark stripe from near hip over knee to ankle; tail moderately long.

Colour. Brown superciliary stripe turning backward over temples at corner of eyes; face black; eyelids apparently flesh-colour; crown greyish brown, hairs whitish at base; occiput, hind-neck, upper parts of body, shoulders, outer side of arms to elbows and flanks, drab; outer side of fore-arms greyish brown, grading into black on wrists; an indistinct purplish-grey stripe on flanks above the greyish white; thighs white tinged with grey and with a brown stripe from near hip over knee to near ankle, darkest at knee, where it is blackish brown, gradually fading away toward hip and ankle; ankles and feet black; chin, sides of neck, throat, inner side of limbs, and under parts of body greyish white; tail above like back, grading into dark brown with whitish hairs intermingled on apical half, beneath greyish white at root, remainder like upperside.

Measurements. Total length 1120 mm.; tail 620; foot 150 (skin). Skull: total length 89·5; occipito-nasal length 77·7; intertemporal width 43·5; hensel 58·7; zygomatic width 70·3; breadth of brain-case 50·3; length of nasals 69; palatal length 25·2; length of upper molar series 21·2; length of mandible 54·2; length of lower molar series 27.

Type in British Museum, no. 89. 5. 14. 1.

This is a pale species of a drab colour with very white thighs both on outer and inner sides. It differs from

P. rhionis in its pale legs and general colour of the upper parts, and from *P. cana* by lacking the pale occipital crest and black legs.

Presbytis margarita, sp. n.

Type locality. Lang Bian, Annam.

Colour. Forehead covered by long, stiff, erect black hairs; whiskers directed backwards, long, extending far beyond the ears, greyish white; space around eyes pale, apparently flesh-colour in life; rest of face black, with a line of whitish hairs on upper lip; a bar of silvery white hairs goes on each side of the head from above and behind ears to the occiput, where they meet and form a point at the nape; top of head, entire upper parts of body, outer sides of arms to elbows, and legs from hips to ankles, except from edge about knees which is black, bright bluish silvery grey, the hairs being bluish grey from the root and tipped with silvery white; forearms, hands, and feet jet-black; chin, throat, under parts of body and inner side of arms and legs sparsely covered with white hairs; flanks paler silvery grey than the upper parts; tail silvery grey.

Measurements. Total length 1315 mm.; tail 775; foot 127 (skin). Skull: total length 91.6; occipito-nasal length 77; intertemporal width 40.1; width of brain-case 52.4; henzel 56; zygomatic width 61.5; length of nasals 11.6; palatal length 28.6; length of upper molars series 27.7; length of mandible 61.4; length of lower molar series 32.3.

Type in British Museum, no. 8. 11. 1. 5.

This is a very handsome monkey with its brilliant pearl-grey shining pelage, quite different from any other species of the genus. The colouring varies greatly according to the light, which sometimes casts shadows on the grey that are almost black in their intensity. The unique type was obtained in Annam by Dr. Vassal.

Presbytis crepuscula, sp. n.

Type locality. Mooleyit, British Burma. Altitude 5000 feet.

Gen. char. Hair on head long, but no elevated crest; colour pale; tail long; stiff hairs above eyes, erect in the centre, standing out at right angles on sides.

Colour. Eyelids and upper lip flesh-colour; forehead and temples black; rest of head above, nape and hind neck, shoulders and arms to elbows on outer side, entire upper

parts of body and flanks drab-grey, palest on dorsal line and darkest on flanks, where in certain lights the hair becomes a drab without the grey tint, varying, however, as the light falls upon it; forearms, in the type, a very old male, on outer side dark greyish brown, on inner edge the arms are covered with russet hairs that extend downward over the hands, faded from the original black; feet brownish black, but overlaid with russet hairs; space above eyes, eyelids, and upper lip flesh-colour, probably orange-yellow in life; face black, covered with short black hairs; whiskers long, extending beyond the ears, black, grading into drab-grey towards the tips; chin whitish; inner side of arms olive-grey tinged with buff; under parts of body greyish white tinged with buff; tail above brownish olive-grey, beneath olive-grey.

Measurements. Total length 1160 mm.; tail 620; foot 150 (skin). Skull: occipital region gone; intertemporal width 45.1; zygomatic width 81.4; breadth of brain-case 60; length of nasals 11.5; palatal length 32.7; length of upper molar series 27.1; length of upper canines 19.4; length of mandible 75; length of lower molar series 33.7.

Type in British Museum, no. 85. 8. 1. 11.

There are two specimens in the British Museum, both males and from the same locality, but the type alone has russet hairs on the arms, hands, and feet. The other male is a beautiful drab-grey above and on the limbs, with hands and feet brownish black, this colour extending slightly on outer side of forearms above the wrist; the tail is silver-grey with a slight olive tinge. The russet hairs seen on the type are probably the result of age. It is a very handsome species in its attractive Quaker dress.

Presbytis crepuscula wroughtoni, subsp. n.

Type locality. Pachebon, Siam.

Gen. char. Forehead and temples not black; hands and feet not jet-black; upper parts generally paler than *P. crepuscula*, more silvery.

Colour. Space above eyes and lips flesh-colour; rest of face blackish brown; a line of stiff black erect hairs above eyes; top and sides of head wood-brown; whiskers reaching beyond ears wood-brown; hind-neck, upper parts of body, and arms to elbow silvery drab-grey, varying in depth according as the light falls upon it, but always paler and of a different hue from *P. crepuscula*; forearms brownish grey, grading at wrist into blackish brown on hands speckled with

whitish from tips of hairs ; legs paler silvery drab-grey, the outer edge over knees brownish ; feet blackish brown ; tail silvery grey on basal half, grading into brownish grey for the remaining portion to tip ; chin, throat, and abdomen white ; rest of under parts, chest, and inner side of limbs dark drab-grey.

Measurements. Total length 1250 mm. ; tail 800 ; foot 150 (skin). Skull : total length 90 ; occipito-nasal length 88.5 ; intertemporal width 67.2 ; length of nasals 10.2 ; palatal length 25.7 ; length of upper molar series 25 ; length of upper canines 15.3 ; length of mandible 65.5 ; length of lower molar series 31.1.

Type in British Museum, no. 61. 10. 8. J.

This race resembles *P. crepuscula*, but is easily distinguished by its brown head and the lighter more silvery hue of the fur.

I have great pleasure in naming this race after Mr. R. C. Wroughton, well known for his papers in conjunction with Mr. Oldfield Thomas on African and Asiatic mammals.

Presbytis lania, sp. n.

Type locality. Chumbi Valley, Thibet.

Gen. char. Hair long, thick, woolly, inclined to gather in masses, especially on upper back and shoulders ; size large.

Colour. Head and hind-neck yellowish white ; sides of head pure white ; upper part of back and shoulders sepia ; flanks and upper part of arms pale brownish grey ; upper parts of legs paler, more silvery grey ; hands black ; chin, throat, under parts of body, and inner side of limbs yellowish white ; tail above like back, paler, more whitish beneath.

Measurements. Size about the same as *P. schistacea*. Skull : total length 125.3 ; occipito-nasal length 102.7 ; intertemporal width 50.8 ; breadth of brain-case 73.5 ; hensen 88.3 ; zygomatic width 102.5 ; length of nasals 12 ; palatal length 49.3 ; length of upper molar series 44.4.

Type in British Museum, no. 9. 7. 16. 1.

The unique type of this new form was lately received by the British Museum, through the Bombay Natural History Society, from Chumbi, Thibet. It is a female, with the feet and most of the tail wanting. It is remarkable for its woolly coat, quite unlike the pelage of *P. schistacea*. It probably represents a species dwelling among the higher mountains to the north of the Himalaya, whose coat has been modified to enable the animals to successfully withstand

the low temperature of those elevated regions. The skull is generally larger than that of a female of *P. schistacea*. It is broader across the orbits, and the orbits themselves are much larger and the orbital ridges greatly arched; the rostrum is broader at base, the palate is longer and its roof flatter; the orbital ridge more prominent, and the depression of the frontal beneath the ridge much greater, and the brain-case is broader. Unfortunately the posterior portion of the skull of *P. schistacea* is lacking and a comparison posterior to the pterygoids cannot be made; the skull of *P. lania* indicates a larger animal, but it is impossible to say, with the imperfect material known at present, whether this is an individual trait or a specific character.

XXXI.—*Description of a new Species of Monkey of the Genus Cercopithecus.* By D. G. ELLIOT, D.Sc., F.R.S.E., &c.

Cercopithecus insignis, sp. n.

Type locality. Congo Forest, West Africa.

Gen. char. Fur long, loose, rather fluffy; tail long; colours bright.

Colour. Broad brow-band, cheeks, and whiskers (the latter reaching to behind ears) yellow; face blackish; nose bluish white; lips covered with white hairs; top of head to nape, band across back at base of neck, shoulders, arms, hands, front of thighs from hips over knees, and feet black; entire upper parts from neck to tail, flanks, and under parts from throat to vent, and inner side of thighs dark orange; tail at base reddish brown, grading into black on apical half; chin and upper part of throat white.

During a late visit to the Antwerp Zoological Gardens I saw this monkey, and recognized at once that it represented a new species, quite unlike any of the genus *Cercopithecus* known. I then stated my opinion to M. L'Hoest, the Director, who, in the most generous spirit, requested me to describe it, and I regret very much that, on account of a *Cercopithecus l'hoesti* existing to-day, I am unable to name this fine species after him; but I take this opportunity to thank him for the facilities given me to examine the fine series of Primates in the Gardens.

C. insignis, as the description shows, is a beautiful animal,